

(FILE 'HOME' ENTERED AT 12:46:03 ON 25 NOV 2003)

FILE 'CAPLUS, USPATFULL, CA' ENTERED AT 12:46:24 ON 25 NOV 2003

L1	1697 S ZEOLITE (P) ISOMER? (P) MORDENITE
L2	241 S L1 AND DIAMETER
L3	221 S L2 AND ISOMERIZ?
L4	110 S L3 AND OXYGEN
L5	65 S L4 AND ?CHLORO?
L6	0 S L5 AND SECONDARY ZEOLITE ARTICLES
L7	20 S L5 AND SECONDARY
L8	20 DUP REM L7 (0 DUPLICATES REMOVED)
L9	11 S L8 AND ISOMERIZING
L10	9 S L8 NOT L9

L9 ANSWER 1 OF 11 USPATFULL on STN
 AN 2003:184066 USPATFULL
 TI Detergent compositions containing modified alkylaryl sulfonate surfactants
 IN Kott, Kevin Lee, Loveland, OH, United States
 Scheibel, Jeffrey John, Loveland, OH, United States
 Severson, Roland George, Cincinnati, OH, United States
 Cripe, Thomas Anthony, Loveland, OH, United States
 Burckett-St. Laurent, James Charles Theophile Roger, Cincinnati, OH, United States
 PA The Procter & Gamble Company, Cincinnati, OH, United States (U.S. corporation)
 PI US 6589927 B1 20030708
 WO 2001005755 20010125
 AI US 2001-980800 20011203 (9)
 WO 2000-US19647 20000719
 PRAI US 1999-144519P 19990719 (60)
 DT Utility
 FS GRANTED
 EXNAM Primary Examiner: Ogden, Necholus
 LREP Taffy, Frank, Zarby, Kim W., Miller, Steven W.
 CLMN Number of Claims: 33
 ECL Exemplary Claim: 1
 DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
 LN.CNT 3278

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is in the field of processes for making alkylbenzenesulfonate surfactants. The processes herein include a combination of two essential steps, delinearization and alkylation. The delinearization step selected herein introduces particular types of limited branching into an aliphatic hydrocarbon having ten or more, but no more than about 16, carbon atoms. The hydrocarbon includes olefin having a hydrocarbon chain length suitable for detergent manufacture, e.g., C.sub.10-C.sub.14, or a corresponding paraffin. The second essential step is an alkylation step having an internal **isomer** selectivity of from 0 to no more than about 40 in which the hydrocarbon is used to monoalkylate benzene catalytically with an alkylation catalyst. Such alkylation catalysts preferably comprise an at least partially crystalline porous **zeolite**-containing solid, the **zeolite** having moderate acidity and intermediate pore size. Preferred alkylation catalysts include certain at least partially dealuminized acidic nonfluorinated **mordenites**. The processes herein further comprise sulfonating, neutralizing and incorporating the resulting modified alkylbenzenesulfonate surfactants into consumer products. The invention relates also to the products of the processes, including modified surfactants and consumer cleaning products containing them.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 2 OF 11 USPATFULL on STN
 AN 2002:330210 USPATFULL
 TI Zeolite catalyst and use for hydrocarbon conversion
 IN Verduijn, Johannes Petrus, Leefdaal, BELGIUM
 van de Berge, Jannetje Maatje, Oostvoorne, NETHERLANDS LR
 Mohr, Gary D., League City, TX, UNITED STATES
 PI US 2002187891 A1 20021212
 AI US 2002-126597 A1 20020419 (10)
 RLI Continuation of Ser. No. US 1997-865343, filed on 29 May 1997, ABANDONED
 DT Utility
 FS APPLICATION
 LREP ExxonMobil Chemical Company, P.O. Box 2149, Baytown, TX, 77522
 CLMN Number of Claims: 83

ECL Exemplary Claim: 1

DRWN 1 Drawing Page(s)

LN.CNT 1613

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB There is provided a zeolite bound zeolite catalyst which can be tailored to optimize its performance and a process for converting hydrocarbons utilizing the zeolite bound zeolite catalyst. The zeolite bound zeolite catalyst comprises a first zeolite and a binder comprising a second zeolite. The structure type of the second zeolite is different from the structure type of the first zeolite. The zeolite bound zeolite finds particular application in hydrocarbon conversion process, e.g., catalytic cracking, alkylation, disproportional of toluene, **isomerization**, and transalkylation reactions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 3 OF 11 USPATFULL on STN

AN 2002:323026 USPATFULL

TI Zeolite catalyst and use for hydrocarbon conversion

IN Verduijn, Johannes Petrus, Leefdaal, BELGIUM

Mohr, Gary D., League City, TX, UNITED STATES

Van den Berge, Jannetje Maatje, Oostvoorne, NETHERLANDS

PI US 2002183192 A1 20021205

AI US 2002-127805 A1 20020424 (10)

RLI Continuation of Ser. No. US 1997-865343, filed on 29 May 1997, ABANDONED

PRAI US 1996-18547P 19960529 (60)

DT Utility

FS APPLICATION

LREP ExxonMobil Chemical Company, P.O. Box 2149, Baytown, TX, 77522

CLMN Number of Claims: 83

ECL Exemplary Claim: 1

DRWN 1 Drawing Page(s)

LN.CNT 1601

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB There is provided a zeolite bound zeolite catalyst which can be tailored to optimize its performance and a process for converting hydrocarbons utilizing the zeolite bound zeolite catalyst. The zeolite bound zeolite catalyst comprises a first zeolite and a binder comprising a second zeolite. The structure type of the second zeolite is different from the structure type of the first zeolite. The zeolite bound zeolite finds particular application in hydrocarbon conversion process, e.g., catalytic cracking, alkylation, disproportional of toluene, **isomerization**, and transalkylation reactions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 4 OF 11 USPATFULL on STN

AN 2002:262501 USPATFULL

TI Method for producing aromatic compounds having alkyl group with at least three carbon atoms

IN Nakatani, Jiro, Nagoya, JAPAN

Minomiya, Eiichi, Okazaki, JAPAN

Inohara, Masahiro, Nagoya, JAPAN

Iwayama, Kazuyoshi, Nagoya, JAPAN

Kato, Tetsuya, Kamakura, JAPAN

PA Toray Industries, Inc., JAPAN (non-U.S. corporation)

PI US 6462248 B1 20021008

AI US 1999-385270 19990830 (9)

PRAI JP 1998-255098 19980909

JP 1998-329944 19981119

DT Utility

FS GRANTED

EXNAM Primary Examiner: Yildirim, Bekir L.

LREP Schnader Harrison Segal & Lewis LLP

CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN 4 Drawing Figure(s); 4 Drawing Page(s)
LN.CNT 2120

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Aromatic compounds having an alkyl group with at least 3 carbon atoms are produced in a process comprising at least one of the following steps:

(1) a step of contacting a starting material that contains an aromatic compound having a branched alkyl group with at least 3 carbon atoms, with a zeolite-containing catalyst in a liquid phase in the presence of hydrogen therein, thereby changing the position of the carbon atoms of the alkyl group bonding to the aromatic ring of the compound;

(2) a step of contacting a starting material that contains an aromatic compound having a branched alkyl group with at least 3 carbon atoms, with a catalyst containing zeolite and containing rhenium and/or silver, in a liquid phase, thereby changing the position of the carbon atoms of, the alkyl group bonding to the aromatic ring of the compound;

(3) a step of contacting a halogenated aromatic compound having an alkyl group with at least 3 carbon atoms, with an acid-type catalyst, thereby **isomerizing** the compound;

(4) a step of treating a mixture of isomers of an aromatic compound having an alkyl group with at least 3 carbon atoms, with a zeolite adsorbent that contains at least one exchangeable cation selected from alkali metals, alkaline earth metals, lead, thallium and silver, thereby separating a specific isomer from the isomer mixture through adsorption.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 5 OF 11 USPATFULL on STN
AN 2002:243532 USPATFULL
TI Method for **isomerizing** halogenated aromatics
IN Kato, Hajime, Aichi, JAPAN
Iwayama, Kazuyoshi, Aichi, JAPAN
Kato, Masashi, Aichi, JAPAN
Yamakawa, Shinobu, Aichi, JAPAN
Okino, Hirohito, Aichi, JAPAN
PA Toray Industries, Inc. (non-U.S. corporation)
PI US 2002132723 A1 20020919
AI US 2001-10561 A1 20011108 (10)
RLI Division of Ser. No. US 1998-113587, filed on 10 Jul 1998, ABANDONED
PRAI JP 1997-185165 19970710
JP 1997-335229 19971205
DT Utility
FS APPLICATION
LREP SCHNADER HARRISON SEGAL & LEWIS, LLP, 1600 MARKET STREET, SUITE 3600, PHILADELPHIA, PA, 19103
CLMN Number of Claims: 21
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 1088

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a catalyst composition with a high halogenated aromatics **isomerization** activity, a halogenated aromatic **isomerization** method using said catalyst composition, and a halogenated aromatics **isomerization** method capable of prolonging the life or regeneration period of the catalyst.

In the present invention, a catalyst composition characterized in that the maximum **diameter** of **secondary** particles of the

zeolite in the formed catalyst is 5 microns or less is used to improve the halogenated aromatics **isomerization** activity. Furthermore, if dissolved **oxygen** is decreased, the life or regeneration period of the catalyst can be prolonged.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 6 OF 11 USPATFULL on STN
AN 2001:26095 USPATFULL
TI Process for **isomerization** of normal C5-C10 paraffins using
bridged long-reticulate-distance dioctahedral phyllosilicate 2:1
IN Benazzi, Eric, Chatou, France
Brendle, Jocelyne, Wittenheim, France
Le Dred, Ronan, Riedisheim, France
Baron, Jacques, Mulhouse, France
Saehr, Daniel, Riedisheim, France
PA Institut Francais du Petrole, France (non-U.S. corporation)
PI US 6191333 B1 20010220
AI US 1998-198606 19981124 (9)
PRAI FR 1997-14889 19971125
DT Utility
FS Granted
EXNAM Primary Examiner: Dunn, Tom
LREP Millen, White, Zelano & Branigan, P.C.
CLMN Number of Claims: 28
ECL Exemplary Claim: 1,16
DRWN No Drawings
LN.CNT 802

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention pertains to the use of a catalyst that contains at least one dioctahedral phyllosilicate 2:1, which is preferably synthesized in a fluoride medium in the presence of HF acid and/or another source of fluoride anions, whose reticulate distance is equal to at least 20.times.10.sup.-10 m (2 nm) and which includes pillars that are based on at least one oxide from the elements of groups IVB, VB, VIB, VIII, IB, IIB, IIA, IVA, or any combination of these oxides, and preferably selected from the group composed of SiO.sub.2, Al.sub.2 O.sub.3, TiO.sub.2, ZrO.sub.2, and V.sub.2 O.sub.5, or any combination of the latter and at least one element from group VIII, in a process for **isomerization** of a feedstock that contains mainly normal paraffins that carry 5 to 10 carbon atoms per molecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 7 OF 11 USPATFULL on STN
AN 1999:63440 USPATFULL
TI Catalyst based on a **mordenite zeolite** modified with cerium, and its use in the **isomerisation** of an aromatic C8 cut
IN Benazzi, Eric, Montesson, France
Alario, Fabio, La Varenne, France
Marcilly, Christian, Houilles, France
PA Institut Francais du Petrole, France (non-U.S. corporation)
PI US 5908967 19990601
AI US 1996-686061 19960724 (8)
PRAI FR 1995-9058 19950724
DT Utility
FS Granted
EXNAM Primary Examiner: Yildirim, Bekir L.
LREP Millen, White, Zelano & Branigan, P.C.
CLMN Number of Claims: 15
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 512

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention concerns a process for the **isomerization** of an aromatic C8 cut using a catalyst containing mordenite, cerium and at least one metal from group VIII. It also concerns a catalyst containing 2-98% by weight of mordenite, 7-40% by weight of cerium, and 0.01-3% by weight of at least one metal from group VIII, the cerium being deposited on the mordenite, and the percentages being with respect to the weight of catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 8 OF 11 USPATFULL on STN
AN 94:31222 USPATFULL
TI Catalyst with a mordenite base containing at least one metal of groups IIa, IVb, IIb or IVa and its use in **isomerization** of a C8 aromatic cut
IN Basset, Jean M., Villeurbanne, France
Choplin, Agnes, Villeurbanne, France
Raatz, Francis, Saint-Avoid, France
Theolier, Albert, Decines, France
Travers, Christine, Rueil Malmaison, France
PA Institut Francais Du Petrole, Rueil Malmaison, France (non-U.S. corporation)
PI US 5302770 19940412
AI US 1993-61475 19930517 (8)
RLI Division of Ser. No. US 1991-781167, filed on 16 Oct 1991, now patented, Pat. No. US 5234873
PRAI FR 1989-2946 19890303
DT Utility
FS Granted
EXNAM Primary Examiner: Dees, Carl F.
LREP Millen, White, Zelano, & Branigan
CLMN Number of Claims: 17
ECL Exemplary Claim: 17
DRWN No Drawings
LN.CNT 545

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to a catalyst for **isomerization** of a C8 aromatic cut containing a mordenite characterized in that said mordenite contains at least one metal of groups IIa, IVb, IIb or IVa and is such that:

its overall Si/Al atomic ratio is between 6 and 15,

its sodium content by weight relative to the weight of dry mordenite is less than 2000 ppm,

its elementary mesh volume is between 2.725 and 2.785 nm.sup.3,

its n-hexane adsorption capacity is greater than 0.065 cm.sup.3 of liquid/gram,

its isooctane adsorption capacity is less than 0.068 cm.sup.3 of liquid/gram.

The invention also relates to the preparation of this mordenite by grafting on an H-shaped mordenite of at least one organometallic compound of said metal.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 9 OF 11 USPATFULL on STN
AN 93:65345 USPATFULL
TI Catalyst with a mordenite base containing at least one metal of groups IIA, IVB, IIB or IVA and its use in **isomerization** of a C8

aromatic cut

IN Basset, Jean M., Villeurbanne, France
 Choplin, Agnes, Villeurbanne, France
 Raatz, Francis, Saint-Avold, France
 Theolier, Albert, Decines, France
 Travers, Christine, Rueil Malmaison, France

PA Institut Francais Du Petrole, Rueil Malmaison, France (non-U.S. corporation)

PI US 5234873 19930810
 WO 9009845 19900907

AI US 1991-781167 19911016 (7)
 WO 1990-FR132 19900226
 19911016 PCT 371 date
 19911016 PCT 102(e) date

PRAI FR 1989-2946 19890303

DT Utility

FS Granted

EXNAM Primary Examiner: Dees, Carl F.

LREP Millen, White, Zelano & Branigan

CLMN Number of Claims: 19

ECL Exemplary Claim: 1,5,6

DRWN No Drawings

LN.CNT 543

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to a catalyst for **isomerization** of a C8 aromatic cut containing a mordenite characterized in that said mordenite contains at least one metal of groups IIa, IVb, IIb or IVa and is such that:

its overall Si/Al atomic ratio is between 6 and 15,

its sodium content by weight relative to the weight of dry mordenite is less than 2000 ppm,

its elementary mesh volume is between 2.725 and 2.785 nm.sup.3,

its n-hexane adsorption capacity is greater than 0.065 cm.sup.3 of liquid/gram,

its isooctane adsorption capacity is less than 0.068 cm.sup.3 of liquid/gram.

The invention also relates to the preparation of this mordenite by grafting on an H-shaped mordenite of at least one organometallic compound of said metal.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 10 OF 11 USPATFULL on STN

AN 92:60047 USPATFULL

TI Mordenite-based catalyst containing at least one metal from group VIII and its use for **isomerizing** a C.sub.8 aromatic fraction

IN Travers, Christine, Rueil Malmaison, France
 Raatz, Francis, Acheres, France
 Marcilly, Christian, Houilles, France

PA Institut Francais du Petrole, Rueil Malmaison, France (non-U.S. corporation)

PI US 5132479 19920721

AI US 1991-786865 19911101 (7)

RLI Division of Ser. No. US 1989-417143, filed on 4 Oct 1989, now patented, Pat. No. US 5077254

PRAI FR 1988-13145 19881005

DT Utility

FS Granted

EXNAM Primary Examiner: Garvin, Patrick P.; Assistant Examiner: Irzinski, E. D.

LREP Millen, White & Zelano

CLMN Number of Claims: 9

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 426

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to a catalyst for **isomerizing** a C.sub.8 aromatic fraction containing a mordenite and at least one metal from group VIII of the periodic classification of elements (such as Pt or Pd), characterized in that the mordenite is such that its skeleton Si/Al atomic ratio is between 6 and 10.5, its sodium weight content is below 2000 ppm, its unit cell volume is between 2.73 and 2.78 nm.sup.3, its benzene adsorption capacity is between 4 and 10% based on the dry mordenite weight and its 1,3,5-trimethylbenzene adsorption capacity is between 0.5 and 2.5% by weight based on the dry mordenite weight. The invention also relates to the preparation of said mordenite.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 11 OF 11 USPATFULL on STN

AN 91:106306 USPATFULL

TI Mordenite-based catalyst containing at least one metal from group VIII and its use for **isomerizing** a C.sub.8 aromatic fraction

IN Travers, Christine, Rueil Malmaison, France

Raatz, Francis, Acheres, France

Marcilly, Christian, Houilles, France

PA Institut Francais du Petrole, Rueil Malmaison, France (non-U.S. corporation)

PI US 5077254 19911231

AI US 1989-417143 19891004 (7)

PRAI FR 1988-13145 19881005

DT Utility

FS Granted

EXNAM Primary Examiner: Dees, Carl F.

LREP Millen, White & Zelano

CLMN Number of Claims: 9

ECL Exemplary Claim: 1,5,9

DRWN No Drawings

LN.CNT 418

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to a catalyst for **isomerizing** C.sub.8 aromatic fractions, the catalyst containing a mordenite and at least one metal from group VIII of the periodic classification of elements (such as Pt or Pd), characterized in that the mordenite is such that its skeleton Si/Al atomic ratio is between 6 and 10.5, its sodium weight content is below 2000 ppm, its unit cell volume is between 2.73 and 2.78 nm.sup.3, its benzene adsorption capacity is between 4 and 10% based on the dry mordenite weight and its 1,3,5-trimethylbenzene adsorption capacity is between 0.5 and 2.5% by weight based on the dry mordenite weight. The invention also relates to the preparation of the mordenite.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 4 OF 9 USPATFULL on STN

AN 2001:237914 USPATFULL

TI EUO-structural-type zeolite with a low Si/Al ratio and its use as catalyst for **isomerization** of C8-aromatic fractions

IN Loic, Rouleau, Oullins, France
Frederic, Kolenda, Chaponost, France
Elisabeth, Merlen, Rueil-Malmaison, France
Fabio, Alario, Neuilly Sur Seine, France

PI US 2001056032 A1 20011227

AI US 2001-849519 A1 20010507 (9)

PRAI FR 2000-5797 20000505
US 2000-209193P 20000605 (60)

DT Utility

FS APPLICATION

LREP MILLEN, WHITE, ZELANO & BRANIGAN, P.C., 2200 CLARENDON BLVD., SUITE
1400, ARLINGTON, VA, 22201

CLMN Number of Claims: 11

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 950

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to an EUO-structural-type zeolite that comprises at least one element X that is selected from among silicon and germanium and at least one element T that is selected from among aluminum, iron, gallium, boron, titanium, vanadium, zirconium, molybdenum, arsenic, antimony, chromium and manganese. The zeolite of the invention has an X/T ratio of between 5 and 50 and an N/T ratio of between 0.010 and 0.065. This invention also relates to the use of the EUO zeolite as a catalyst in a process for conversion of hydrocarbon feedstocks and more particularly in a process for **isomerization** of aromatic compounds with 8 carbon atoms per molecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 5 OF 9 USPATFULL on STN

AN 2001:229804 USPATFULL

TI Process for preparation of an EUO-structural-type zeolite, the zeolite that is obtained and its use as catalyst for **isomerization** of C8-aromatic compounds

IN Rouleau, Loic, Oullins, France
Kolenda, Frederic, Chaponost, France
Merlen, Elisabeth, Rueil-Malmaison, France
Alario, Fabio, Neuilly Sur Seine, France

PI US 2001051757 A1 20011213

US 6616910 B2 20030909

AI US 2001-849483 A1 20010507 (9)

PRAI FR 2000-5799 20000505
US 2000-212047P 20000616 (60)

DT Utility

FS APPLICATION

LREP MILLEN, WHITE, ZELANO & BRANIGAN, P.C., 2200 CLARENDON BLVD., SUITE
1400, ARLINGTON, VA, 22201

CLMN Number of Claims: 23

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1016

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to a process for synthesis of an EUO-structural-type zeolite that comprises at least one element X that is selected from among silicon and germanium and at least one element T that is selected from among aluminum, iron, gallium, boron, titanium, vanadium, zirconium, molybdenum, arsenic, antimony, chromium and manganese, whereby said process is carried out in the presence of an

organic structuring agent that is derived from dibenzyltrimethylammonium (DEDMA) or its precursors and in the presence of nuclei of at least one zeolitic material of the same structure as the zeolite that is to be synthesized. The zeolite that is thus obtained has an X/T ratio of between 5 and 50. It is used in particular as a catalyst, for example in a process for **isomerization** of aromatic compounds with 8 carbon atoms per molecule.